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## Flight Report

| Aircraft :                         | Kenn Borek Air DC-3T Basler  |
|------------------------------------|--|
| Operating Site(s)<br>From / To :   | NZIR/NZIR  |
| Flight Date :                      | November 27, 2009 (NZDT)   |
| Flight Number /<br>Data Flight # : | F12 / 9  |
| Time out:                          | 0131 UTC   |
| Time in:                           | 0729 UTC   |
| Flight Time :                      | 6 hrs  |
| FIt Request # / PI:                | NASA 20090602-084128 (Blankenship)   |
| Purpose of Flight :                | Data [X] Ferry [ ] Functional Check [ ] Other [ ]  |
| Sensor Payload :                   | University of Texas at Austin HiCARS ice penetrating radar;<br>UT Reigl LD-90 laser distance meter; UT Geometrics 823-A<br>magnetometer; USAF Sigma Space photon counting lidar, NGA<br>BGM-3 gravity meter.   |
| Comments:                          | The aircraft flew its sixth survey flight in its NASA/NERC/NSF ICEBRIDGE/ICECAP configuration from McMurdo's sea ice runway. The radar, laser altimeter, lidar prototype and magnetic fields instruments all performed excellently – the minor F11 anomaly in the radar was debugged and procedures put in place to prevent its reoccurrence. The gravimeter returned to the aircraft and functioned perfectly. All systems acquired data over Byrd Glacier and ICESAT tracks 0149, 0283 and 0233, the last line crossing previously flown lines. Large crevasse fields were again observed and imaged at sites of known subglacial lakes. This flight completes our initial suite of ICESAT tracks across the Byrd Glacier lake district, providing across track topographic constraints and geophysical context for understanding this active hydrological system. |

SUBMITTED BY: Duncan Young 28 November 2009